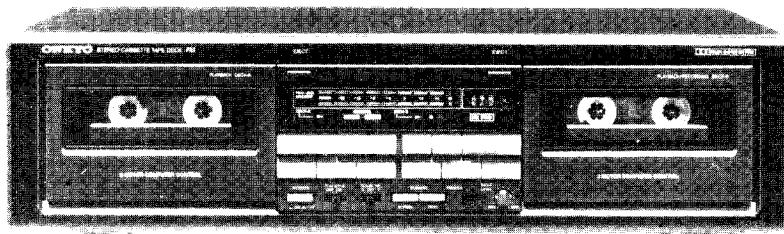


ONKYO SERVICE MANUAL

STEREO CASSETTE TAPE DECK MODEL TA-W111



| | |
|--------------|-------------------------|
| UDN, UDC, UD | 120V AC, 60Hz |
| UP | 230V AC, 50Hz |
| UW | 120 or 220V AC, 50/60Hz |
| UQA | 240V AC, 50Hz |

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK **A** ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

SPECIFICATIONS

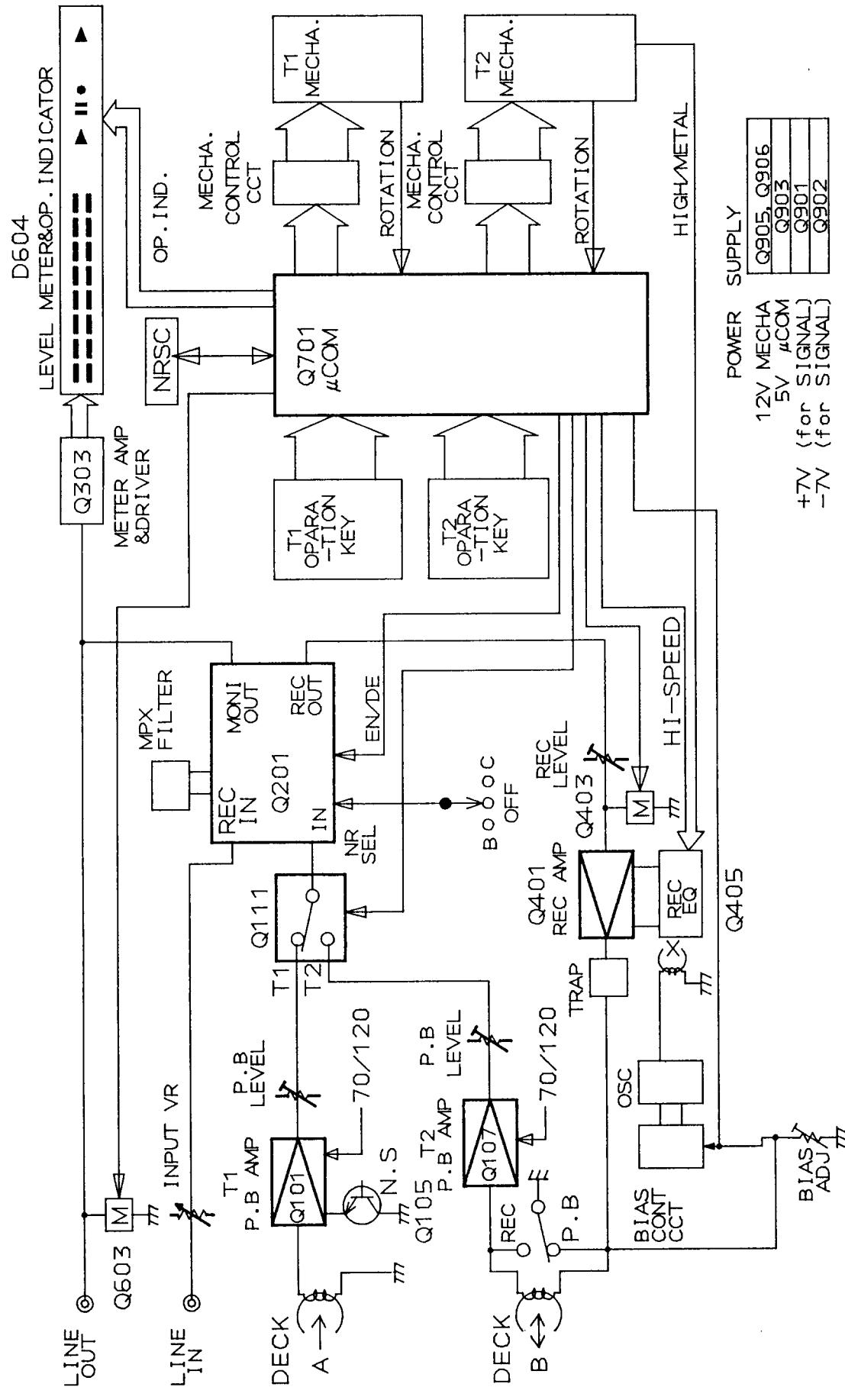
Track System: 4-tracks, 2-channels
 Erasing System: AC erase
 Tape Speed: 4.8 cm/sec. (1-7/8 i.p.s.)
 9.6 cm/sec. (3-3/4 i.p.s.) (high speed dubbing)
 Wow and Flutter: 0.07% (WRMS)
 Frequency Response: 20–15,000Hz (Normal)
 (30–14,000Hz \pm 3dB)
 20–16,000Hz (High)
 (30–15,000Hz \pm 3dB)
 20–17,000Hz (Metal)
 (30–16,000Hz \pm 3dB)

S/N Ratio: Dolby NR off: 58dB (metal position tape)
 A noise reduction of 10dB above 5kHz and 5dB at 1kHz is possible with Dolby B NR.
 A noise reduction of 20dB at 5kHz is possible with Dolby C NR.
 Line IN: 2
 Input sensitivity: 80mV
 Input impedance: 50 kohms
 Line OUT: 2
 Standard output level: 500mV (0dB)
 Optimum load impedance: over 1 kohms
 Motors: DC servo motor x 2; DC motor x 2
 Heads: REC/PB: 1
 PB: 1
 ERASE: 1
 Power Supply Rating: U.K. and Australian models:
 AC 240V, 50Hz
 U.S.A. and Canadian models: AC 120V, 60Hz
 Worldwide models: AC 120V and 220V switchable, 50/60Hz
 Power Consumption: 33 watts
 Dimensions: 455(W) x 120(H) x 306(D)mm
 (17-15/16" x 4-3/4" x 12-1/16")
 Weight: 5.6 kg. (12.3 lbs.)

Specifications and external appearance are subject to change without notice because of product improvements

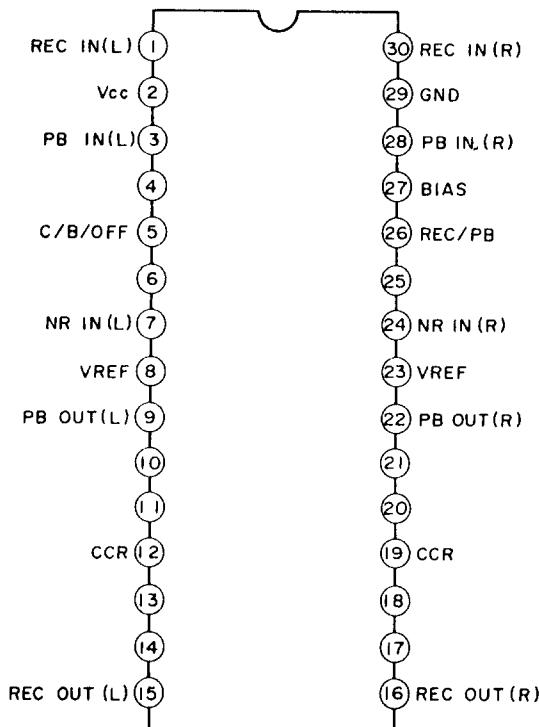
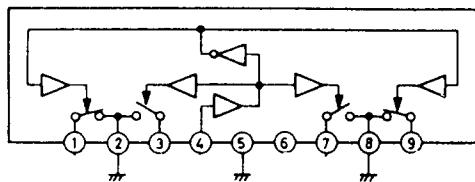


BLOCK DIAGRAM



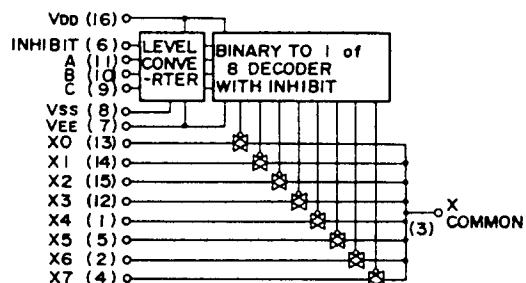
IC BLOCK DIAGRAM

HA12142NT (DOLBY NR)

 μ PC 1330HA (REC/PB SW) μ PC1330HA

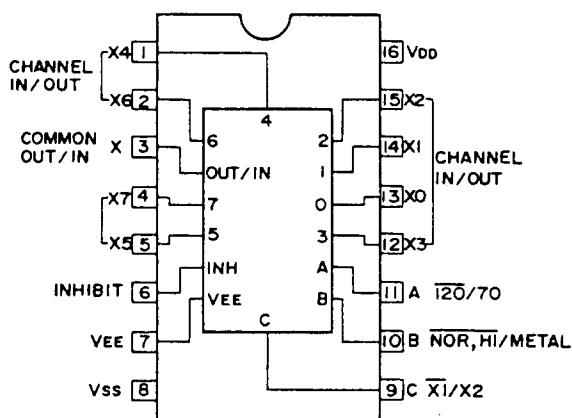
| Pin No. | Function |
|---------|-------------------|
| 1, 9 | PB. signal |
| 2 | GND |
| 3, 7 | REC signal |
| 4 | REC/PB SW control |
| 5 | GND |
| 6 | +B |
| 8 | GND |

4051B (ANALOG SW)



| INHIBIT | A(11) | B(10) | C(9) | ON SWITCH |
|---------|-------|-------|------|-----------|
| L | L | L | L | XO (13) |
| L | H | L | L | X1 (14) |
| L | L | H | L | X2 (15) |
| L | H | H | L | X3 (12) |
| L | L | L | H | X4 (1) |
| L | H | L | H | X5 (5) |
| L | L | H | H | X6 (2) |
| L | H | H | H | X7 (4) |
| H | X | X | X | NONE |

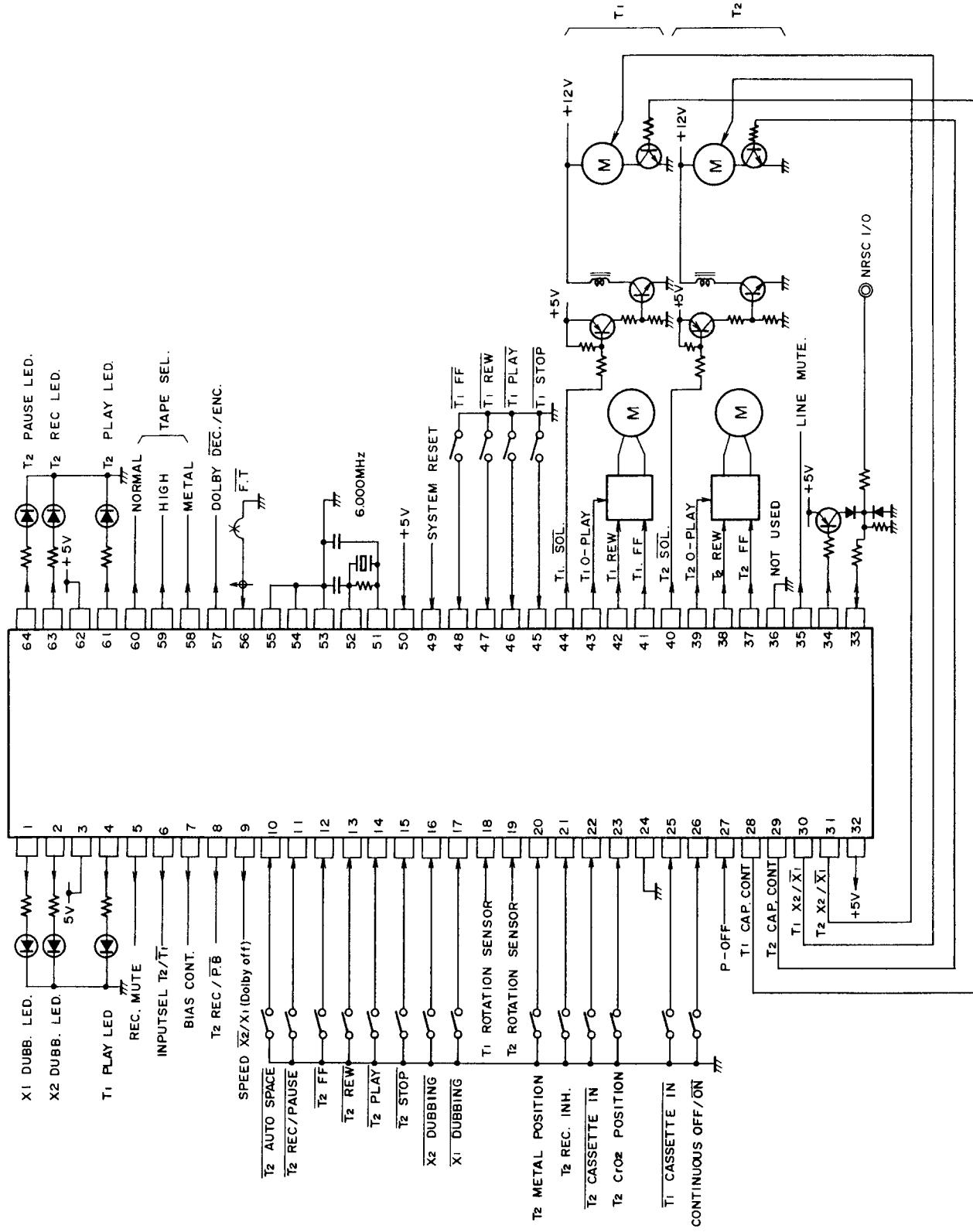
X: Don't Care



MICRO COMPUTER PORT NAMES AND FUNCTION (HD614049 SA-B05)

| No. | Name | IN/OUT | Function |
|--------|----------------------|--------|------------------------------------|
| 1 | X1 DUBBING LED | O | Dubbing indication, H:ON |
| 2 | X2 DUBBING LED | O | Dubbing indication, H:ON |
| 3 | NC | | |
| 4 | T1 FWD. LED | O | FWD play indication, H:ON |
| 5 | REC. MUTE | O | Recording muting, H:ON |
| 6 | INPUT SEL. T2/T1 | O | T1/T2 play back signal selection |
| 7 | BIAS CONTROL | O | Bias oscillation control, H:ON |
| 8 | REC/PB | O | REC/PB selection |
| 9 | SPEED X1/X2 | O | Tape speed selection |
| 10 | T2 AUTO SPACE | I | Auto space operation |
| 11 | T2 REC/PAUSE | I | REC/PAUSE operation |
| 12 | T2 FF | I | Fast forward operation |
| 13 | T2 REW | I | Rewind operation |
| 14 | T2 PALY | I | FWD-PLAY operation |
| 15 | T2 STOP | I | STOP operation |
| 16 | X2 DUBBING | I | Dubbing operation |
| 17 | X1 DUBBING | I | Dubbing operation |
| 18 | T1 ROTATION-SENSOR | I | Reel rotation sensor |
| 19 | T2 ROTATION-SENSOR | I | Reel rotation sensor |
| 20 | METAL SW. | I | Record equalizer selection (METAL) |
| 21 | T2 REC. INH. | I | Recording prevention |
| 22 | T2 CASSETTE IN | I | Cassette loading detection |
| 23 | CrO ₂ SW. | I | Record equalizer selection (HIGH) |
| 24 | NC | | |
| 25 | T1 CASSETTE IN | I | Cassette loading detection |
| 26 | CONTINUOUS | I | CONTINUOUS OFF/ON |
| 27 | P-OFF | I | Power OFF detection |
| 28 | T1 CAPSTAN ON/OFF | O | Capstn motor control |
| 29 | T2 CAPSTAN ON/OFF | O | Capstan motor control |
| 30 | T1 SPEED X2/X1 | O | Tape speed control |
| 31 | T2 SPEED X2/X1 | O | Tape speed control |
| 32 | Vcc | | VCC +5V |
| 33 | NRSC IN | I | Remote control signal |
| 34 | NRSC OUT | O | Remote control signal |
| 35 | LINE MUTE | O | Line muting |
| 36 | NOT USED | | |
| 37 | T2 REEL-FF | O | Reel motor rotation fast forward |
| 38 | T2 REEL-REW | O | Reel motor rotation in rewind |
| 39 | T2 O-PLAY | O | Reel motor rotation PLAY with "H" |
| 40 | T2 SOLENOID | O | Solenoid drive |
| 41 | T1 REEL-FF | O | Reel motor rotation fast forward |
| 42 | T1 REEL-REW | O | Reel motor rotation in rewind |
| 43 | T1 O-PLAY | O | Reel motor rotation PLAY with "H" |
| 44 | T1 SOLENOID | O | Solenoid drive |
| 45 | T1 STOP | I | STOP operation |
| 46 | T1 PALY | I | FWD-PLAY operation |
| 47 | T1 REW | I | Rewind operation |
| 48 | T1 FF | I | Fast forward operation |
| 49 | SYSTEM RESET | | System reset for microcomputer |
| 50 | TEST | | |
| 51, 52 | OSC1, OSC2 | | System clock OSC |
| 53 | GND | | GND |
| 54 | NOT USED | | |
| 55 | NOT USED | | |
| 56 | F.T | | |
| 57 | DOLBY ENC/DEC | O | Dolby ENC/DEC selector |
| 58 | TAPE SEL. METAL | O | Tape selector |
| 59 | TAPE SEL. HIGH | O | Tape selector |
| 60 | TAPE SEL. NORMAL | O | Tape selector |
| 61 | T2 PLAY LED | O | PLAY indication, H:ON |
| 62 | NC | | |
| 63 | T2 REC. LED | O | REC indication, H:ON |
| 64 | T2 PAUSE LED | O | PAUSE indication |

MICRO COMPUTER (HD614049SA-B05)



ADJUSTMENT PROCEDURES

PRECAUTIONS

1. Before adjustment, clean the following parts with an alcohol moistened swab.

| | |
|------------------------|--------------|
| * record/playback head | * erase head |
| * pinch roller | * capstan |
2. Do not use magnetized screwdriver for adjustments.
3. Demagnetize record/playback head with a head demagnetizer.

TEST EQUIPMENT/TOOLS REQUIRED:

Audio oscillator
 Digital frequency counter
 Oscilloscope
 Attenuator
 AC voltmeter
 Non-magnetic screw driver
 Test tapes

| | | |
|---------|---|---|
| TCC-153 | : | 10 KHz, -5dB |
| MTT-111 | : | 3 kHz, -0dB |
| MTT-150 | : | Dolby level calibration 400Hz, tone 200nWb/m |

| Item | Connection of instrument | Line input | Test tape | Mode | Output indicator | Adjustment point | Adjust | Remarks |
|--------------------|---|---------------------------------------|----------------------------|-----------|-------------------|--|--|--|
| 1. Tape speed | Frequency counter to LINE output terminal | | MTT-111 | PB | Frequency counter | T1 Normal R728 T1 High R731 T2 Normal R747 T2 High R750 | 3005±5Hz 6010±10Hz 3005±5Hz 6010±10Hz | High speed connect the TP5 (T1) to GND TP-6 (T2) to GND High speed first |
| 2. Head azimuth | AC voltmeter and oscilloscope to LINE output terminal | | TCC-153 | PB | AC voltmeter | Head azimuth screw | Maximum and same phase at channels L and R | fig-1 |
| 3. Play-back level | AC voltmeter to terminals TP-3 and TP-4 | | MTT-150 | PB | AC voltmeter | T1 R113 (Ch.L) T1 R114 (Ch.R) T2 R131 (Ch.L) T2 R132 (Ch.R) | 300mV | |
| 4. OSC Block | Frequency counter to P401 read loose coupling | | T2 METAL TAPE MX-C90 | T2 REC | Frequency counter | L403 | 85kHz±2kHz | |
| 5. Bias current | fig-2 | 1kHz, -20dB and 12kHz, -20dB | UD-1 C-90 | REC/PB | AC voltmeter | R473 (Ch.L) R474 (Ch.R) | Same level at REC/PB | Input VR maximum. |
| 6. Record level | fig-2 | 1kHz | UD-1 C-90 | REC | AC voltmeter | Attenuator or AF OSC output | 350mV | |
| | | | | REC/PB | AC voltmeter | R405 (Ch.L) R406 (Ch.R) | Same level at REC/PB | |

Blank tape

NORMAL UD-1 C-90
 HIGH XL-II C-90
 METAL MX C-90
 PLAY torque 30~70g/cm
 FF. REW torque 80~180g/cm
 Back tension 2~7g/cm

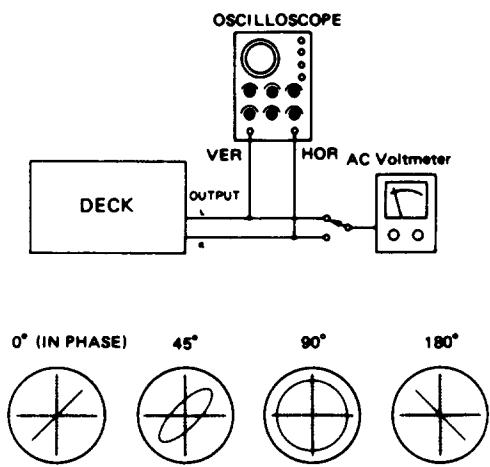
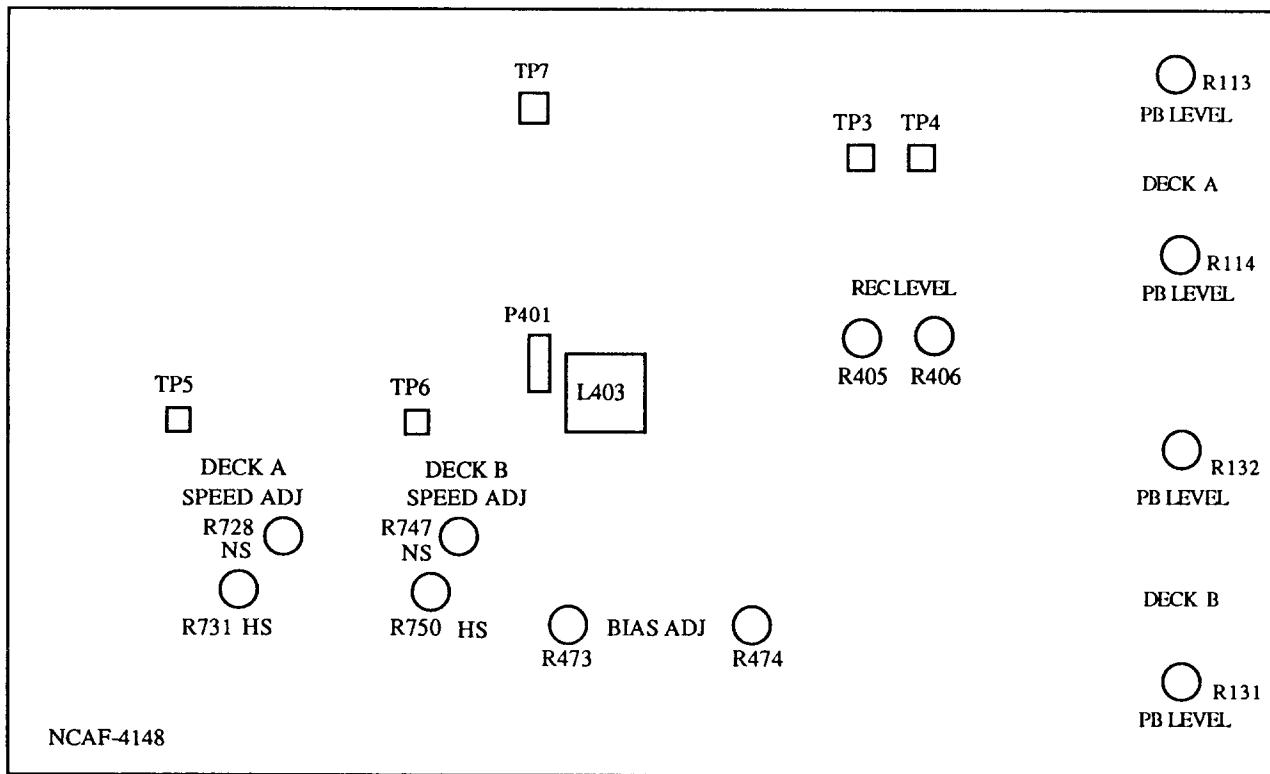


fig-1

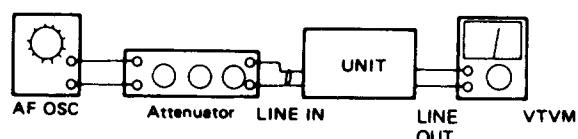
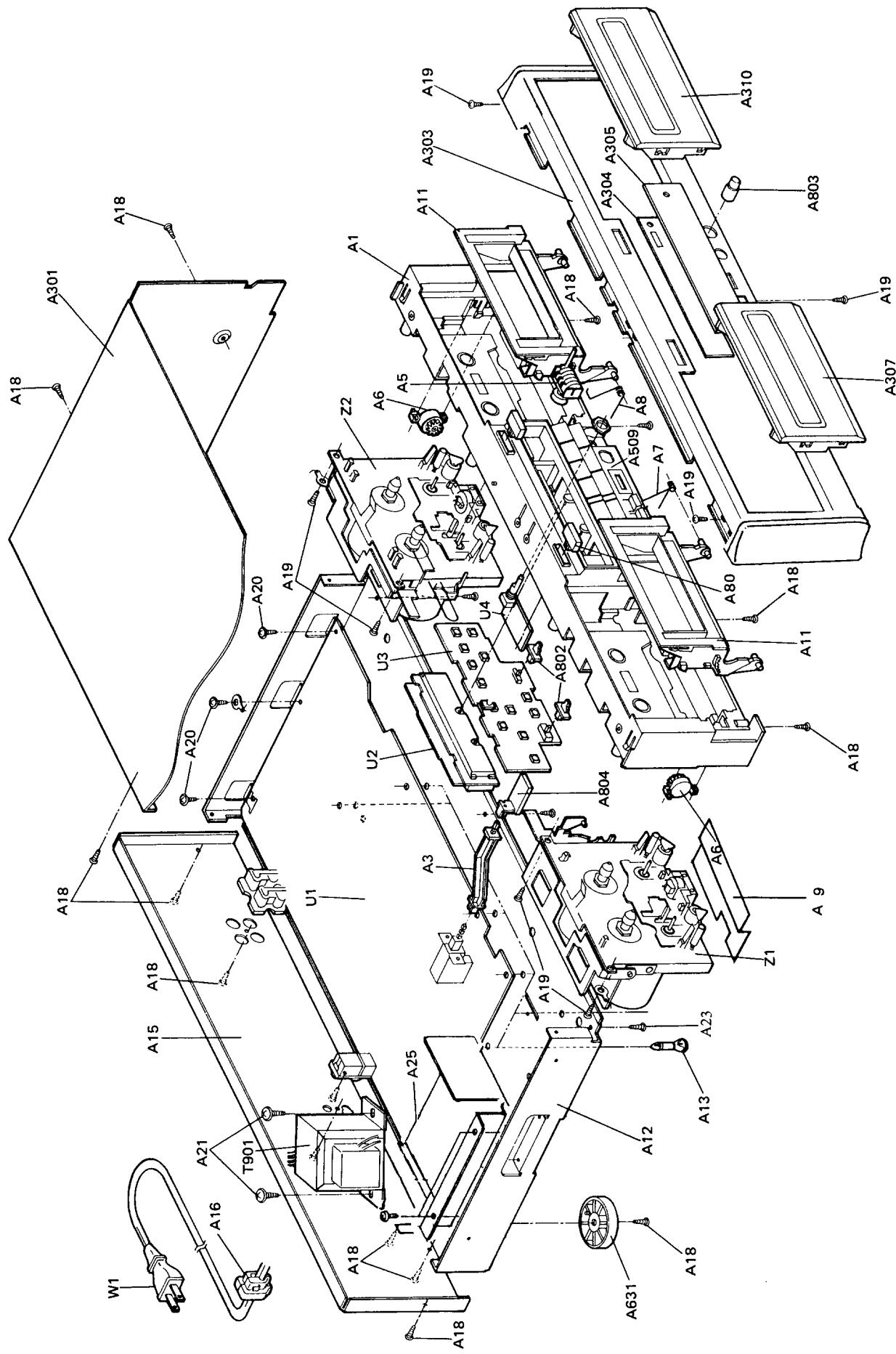


fig-2

CHASSIS-EXPLODED VIEW



CHASSIS-EXPLODED VIEW PART LIST

| REF.NO. | PARTS NO. | DESCRIPTION | REF. NO. | PART NO. | DESCRIPTION |
|---------|-------------|-----------------------------|----------|------------|-------------------------|
| A1 | 27110646Y | FRONT BRACKET AS | A802 | 28324233Y | KNOB (DOL) |
| A3 | 27223135A | JOINT (POW) | A803 | 28324338 | KNOB (VOL) |
| A5 | 24601220 | TAPE COUNTER | A804 | 28324234Y | KNOB (POW) |
| A6 | 28400282 | DAMPER | A802 | 25065123 | NS5-1258P (W) |
| A7 | 27180477A | SPRING (A) | T901 | 23065122 | NPT-1100D (D) |
| A8 | 27180476A | SPRING (B) | | 23065122 | NPT-1100P (P) |
| A9 | 27130646DY | BRACKET (F) | | 23065124 | NPT-1100DG (W) |
| A11 | 28400473-1A | FRAME AS (CASSETTE) | U1 | IN109548-7 | NAAF-4148-7 |
| | 28400463B | FRAME (CASSETTE) | U2 | IN109549-7 | NADIS-4149-7 |
| -a | 27180435 | SPRING | U3 | IN109550-7 | NASW-4150-7 |
| -c | 28141109 | CUSHION | U4 | IN109551-7 | NAETC-4151-7 |
| A12 | 27100233 | CHASSIS | W1 | 253112A | AC CORD AS-UC4-#18 (D) |
| A13 | 27190480 | HOLDER | | 253112A | AC CORD AS-CEE (P/W) |
| A15 | 27121546Y | BACK PANEL (D) | Z1 | 244153 | CASSETTE DECK MECHANISM |
| | 27121546-1Y | BACK PANEL (P) | | 253164 | NDM-143 |
| | 27121546-2Y | BACK PANEL (W) | Z2 | 244154 | CASSETTE DECK MECHANISM |
| A16 | 27300750 | BUSHING (CORD) | | | NDM-144 |
| A18 | 834430088 | TAP-TIGHT SCREW 3TTS+8B(BC) | | | |
| A19 | 833430080 | TAP-TIGHT SCREW 3TTP+8P(BC) | | | |
| A20 | 831130088 | TAP-TIGHT SCREW 3TTW+8B | | | |
| A21 | 83044069 | TAP-TIGHT SCREW 4x6 | | | |
| A23 | 835430068 | TAP-TIGHT SCREW 3TTF+6B(BC) | | | |
| A25 | 27130608D | BRACKET (PT) | | | |
| A301 | 28184479 | TOP COVER | | | |
| A302 | 28140837 | CUSHION 250x10x9t | | | |
| A303 | IN129701K | FRONT PANEL | | | |
| | 28125226BY | END CAP (L) | | | |
| -a | 28125227BY | END CAP (R) | | | |
| -b | 27215205Y | COSMETIC FRAME | | | |
| -c | 28135199 | BADGE | | | |
| -d | 28133277Y | BACK PLATE | | | |
| A304 | 28191586Y | CLEAR PLATE | | | |
| A305 | 28400710Y | CASSETTE LID AS (A) | | | |
| A307 | 28400711Y | CASSETTE LID (A) | | | |
| -a | 28400625 | WINDOW | | | |
| -b | 28400710-1Y | CASSETTE LID AS (B) | | | |
| A310 | 28400711-1Y | CASSETTE LID (B) | | | |
| -a | 28400625 | WINDOW | | | |
| -b | 27215221 | COSMETIC FRAME | | | |
| A509 | 27175254 | LEG AS | | | |
| A631 | 28324232Y | KNOB (E) | | | |

NOTE: THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

PRINTED CIRCUIT BOARD PARTS LIST

NAAF-4148-7

| CIRCUIT NO. | PART NO. | DESCRIPTION | CIRCUIT NO. | PART NO. | DESCRIPTION |
|--------------------|-----------------------|-----------------------------|-------------|----------------------------------|---|
| Ics | | | | | |
| Q101 | 222956 | NJM-2068D-D | Q905, Q906 | 2213284 2202115 or 2202116 | 2SC1740S-R 2SD2061-E or 2SD2061-F |
| Q107 | 222956 | NJM-2068D-D | D602-D604 | 223163 | 1SS133 |
| Q111 | 222840661 | 4066B | D701 | 224450752 | MTZ7.5B |
| Q201 | 22240388 | HA12142NT | D702 | 224450433 | MTZ4.3C |
| Q401 | 22240267 | CXA1198AP | D703 | 223163 | 1SS133 |
| Q405 | 222840511 | 4051B | D704 | 224450752 | MTZ7.5B |
| Q605 | 22240147 | μ PC1330HA | D705 | 224450433 | MTZ4.3C |
| Q701 | 22240483 | HD614049SAB05 | D706, D707 | 223163 | 1SS133 |
| Q702 | 22240239 | TA-7291S | D708 | 224150562 or 224650562 | 05AZ5.6Y or HZ5.6EB2 |
| Q710 | 22240239 | TA-7291S | D709 | 223163 | 1SS133 |
| Q901 | 222780065JRC | 78M06 | D901-D906 | 22380046 | AM01Z |
| Q902 | 222790065JRC | 79M06 | D907, D908 | 223163 | 1SS133 |
| Q903 | 222780055MIT | 78M05 | D909 | 224150623 or 224650623 | 05AZ6.2Z or HZ6.2EB3 |
| Transistors | | | | | |
| Q103-Q106 | 2213285 or 2213284 | 2SC1740S-S or 2SC1740S-R | D910 | 224151303 or 224650623 | 05AZ13Z or HZ6.2EB3 |
| Q109, Q110 | 2213285 or 2213284 | 2SC1740S-S or 2SC1740S-R | D911-D914 | 223163 | 1SS133 |
| Q113 | 221281 or 2213570 | DTC114YS or RN1207 | L201, L202 | 233407 | NMC-6079 |
| Q203 | 221281 or 2213570 | DTC114YS or RN1207 | L401, L402 | 231165 | NTR-6506 |
| Q205 | 2212600 or 2213580 | DTA124ES or RN2203 | L403 | 231063 | NLO-2037 |
| Q403, Q404 | 2213285 or 2213284 | 2SC1740S-S or 2SC1740S-R | C111, C112 | 354742219 | 220 μ F16V, ELECT. |
| Q407 | 221281 or 2213570 | DTC114YS or RN1207 | C123, C124 | 354742219 | 220 μ F16V, ELECT. |
| Q408 | 2212855 or 2212853 | 2SB1068-U or 2SB1068-K | C203-C206 | 354784799 | 0.47 μ F50V, ELECT. |
| Q409 | 2211706 or 2211705 | 2SD655-F or 2SD655-E | C207 | 354742209 | 22 μ F16V, ELECT. |
| Q410 | 221281 or 2213570 | DTC114YS or RN1207 | C213, C214 | 354780229 | 2.2 μ F50V, ELECT. |
| Q411, Q412 | 2211544 | 2SC1959-Y | C221, C222 | 354741019 | 2.2 μ F50V, ELECT. |
| Q601 | 221281 or 2213570 | DTC114YS or RN1207 | C401, C402 | 354780109 | 1 μ F50V, ELECT. |
| Q602 | 2213355 or 2213354 | 2SA933S-S or 2SA933S-R | C403-C406 | 354780229 | 2.2 μ F50V, ELECT. |
| Q603, Q604 | 2211706 or 2211705 | 2SD655-F or 2SD655-E | C407 | 354722219 | 220 μ F6.3V, ELECT. |
| Q703, Q704 | 221281 or 2213570 | DTC114YS or RN1207 | C408 | 354744709 | 47 μ F16V, ELECT. |
| Q705 | 2211945 | 2SK246-GR | C411 | 370131234 | 0.012 μ F100V, APS |
| Q706 | 2212600 or 2213580 | DTA124ES or RN2203 | C601 | 354780479 | 4.7 μ F50V, ELECT. |
| Q707, Q708 | 2211706 or 2211705 | 2SD655-F or 2SD655-E | C604 | 354784799 | 0.47 μ F50V, ELECT. |
| Q709 | 2211255 | 2SC1815-GR | C607 | 354742219 | 220 μ F16V, ELECT. |
| Q711, Q712 | 221281 or 2213570 | DTC114YS or RN1207 | C701 | 354742209 | 22 μ F16V, ELECT. |
| Q713 | 2211945 | 2SK246-GR | C703 | 354741019 | 100 μ F16V, ELECT. |
| Q714 | 2212600 or 2213580 | DTA124ES or RN2203 | C707 | 354741019 | 100 μ F16V, ELECT. |
| Q715, Q716 | 2211706 or 2211705 | 2SD655-F or 2SD655-E | C711 | 354780109 | 1 μ F50V, ELECT. |
| Q717 | 2211255 | 2SC1815-GR | C901 | 3500065A | 0.01 μ F AC400V, IS. |
| Q718, Q719 | 2212600 or 2213580 | DTA124ES or RN2203 | C903 | 393152227S | 2200 μ F25V, ELECT. |
| Q720 | 2212600 or 2213580 | DTA124ES or RN2203 | C904 | 354742219 | 220 μ F16V, ELECT. |
| Q904 | 2213285 or | 2SC1740S-S or | C906 | 393152227S | 2200 μ F25V, ELECT. |
| | | | C907 | 354742219 | 220 μ F16V, ELECT. |
| | | | C909 | 393156827S | 6800 μ F25V, ELECT. |
| | | | C911 | 354742219 | 220 μ F16V, ELECT. |
| | | | C913-C915 | 354741019 | 100 μ F16V, ELECT. |
| | | | C916 | 354780479 | 4.7 μ F50V, ELECT. |
| | | | C917 | 354742219 | 470 μ F16V, ELECT. |
| | | | C919 | 354742219 | 470 μ F16V, ELECT. |
| | | | C921 | 354742219 | 220 μ F16V, ELECT. |
| | | | C923 | 354742219 | 220 μ F16V, ELECT. |
| | | | C927 | 354741019 | 100 μ F16V, ELECT. |
| | | | C929 | 354741019 | 100 μ F16V, ELECT. |
| | | | C935, C936 | 354722219 | 220 μ F6.3V, ELECT. |

| CIRCUIT NO. | PART NO. | DESCRIPTION |
|----------------------|------------|--------------------|
| Resistors | | |
| R113, R114 | 5210220 | N06HR50KBD |
| R131, R132 | 5210220 | N06HR50KBD |
| R405, R406 | 5210064 | N06HR 10KBD |
| R458 | 442520104F | RS1/2WBJ 1Ω |
| R459 | 442523304F | RS1/2WBJ 33Ω |
| R460 | 442521514F | RS1/2WBJ 150Ω |
| R461 | 442522714F | RS1/2WBJ 270Ω |
| R465, R466 | 5210070 | N06HR100KBD |
| R724 | 442524704F | RS1/2WBJ 47Ω |
| R728 | 5210218 | N06HR20KBD |
| R731 | 5210217 | N06HR10KBD |
| R743 | 442524704F | RS1/2WBJ 47Ω |
| R747 | 5210218 | N06HR20KBD |
| R750 | 5210217 | N06HR10KBD |
| R903 | 441622704F | RS1/2WBJ 27Ω |
| R905, R906 | 442520224F | RS1/2WBJ 2.2Ω |
| Switch | | |
| S901 | 25035558 | NPS-111-L520P |
| Plug, socket | | |
| P101 | 25055133 | NPLG-3P117 |
| P102 | 25055136 | NPLG-6P120 |
| P201 | 25045329 | NPS-4PDBL183 |
| P401 | 25055132 | NPLG-2P-116 |
| P701 | 25045330 | NPJ-2PDBL184 |
| P702A | 2000991 | NSAS-14P943 |
| P703A | 2000992 | NSAS-6P944 |
| P704A | 2000990 | NSAS-6P942 |
| P705A | 2000991 | NSAS-14P943 |
| P706A | 2000992 | NSAS-6P944 |
| P707A | 2002391010 | NSAS-10P0035 |
| Miscellaneous | | |
| 27160211-1 | | RAD-68B, RADIATOR |
| 27160211 | | RAD-68, RADIATOR |
| 27141059 | | BRACKET |
| 25050092 | | NTM-1S33, TERMINAL |
| 82143006 | | 3P+6FN(BC) |

NADIS-4149-7

| CIRCUIT NO. | PART NO. | DESCRIPTION |
|-------------------|------------------------|-------------------------------|
| Ic | | |
| Q303, Q304 | 222623 | IR2E02 |
| LED | | |
| D604 | 225253 | LS-0241 |
| Capacitors | | |
| C301, C302 | 353750479S | 4.7μF25V, ELECT. |
| C303, C304 | 353780109S | 1μF50V, ELECT. |
| C305 | 353750479S | 4.7μF25V, ELECT. |
| Socket | | |
| P708A | 2000985A or 200098A | NSAS-18P937 or NSAS-18P934 |

NASW-4150-7

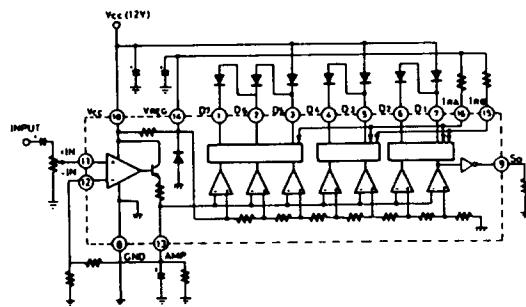
| CIRCUIT NO. | PART NO. | DESCRIPTION |
|---------------|----------|--------------|
| Switch | | |
| S201 | 25065297 | NSS-23119 |
| S701-S704 | 25035548 | NPS-111-S510 |
| S706 | 25065364 | NSS-12138 |
| S707-S710 | 25035548 | NPS-111S510 |
| S712-S715 | 25035548 | NPS-111S510 |

NAETC-4151-7

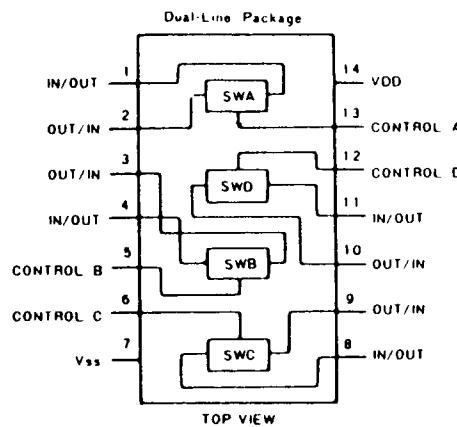
| CIRCUIT NO. | PART NO. | DESCRIPTION |
|------------------|----------|---------------|
| Resistors | | |
| R203, R204 | 5104214 | N09R2L50KA15F |

IC BLOCK DIAGRAM

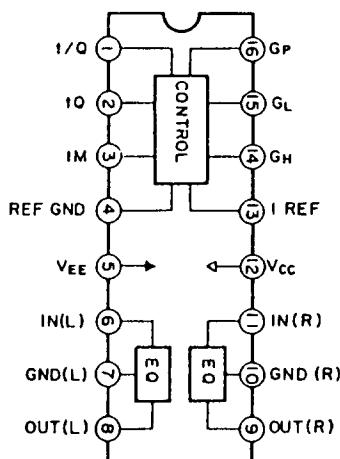
IR-2E02 (LEVEL METER DRIVE)



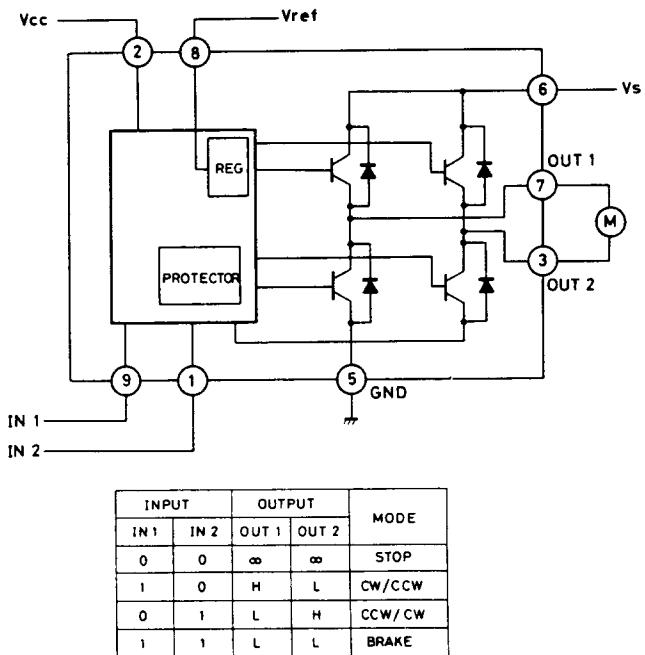
4066B (ANALOG SW)



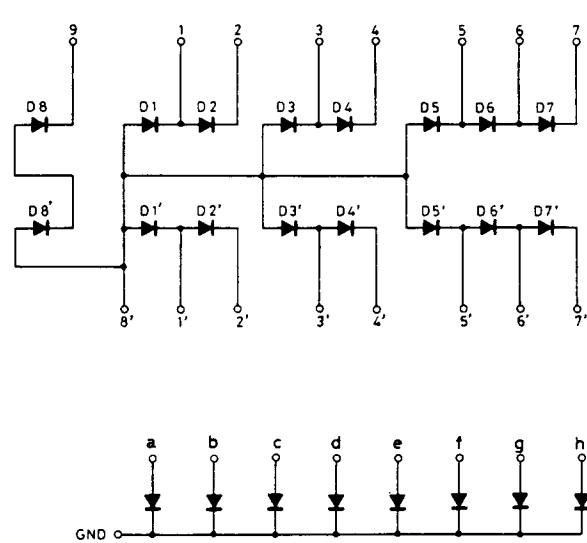
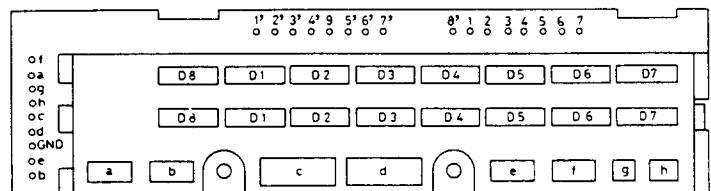
CXA1198A (REC EQ)



TA7291S (MOTOR DRIVE)



LS0241 (DISPLAY TUBE)



D1 ~ D4, D8, D1' ~ D4' D8'; a, b, e, f, ---- - GRN
 D5 ~ D7, D5' ~ D7'; c, d, g, h ----- RED

TAPE MECHANISM PARTS LIST (DECK-B)

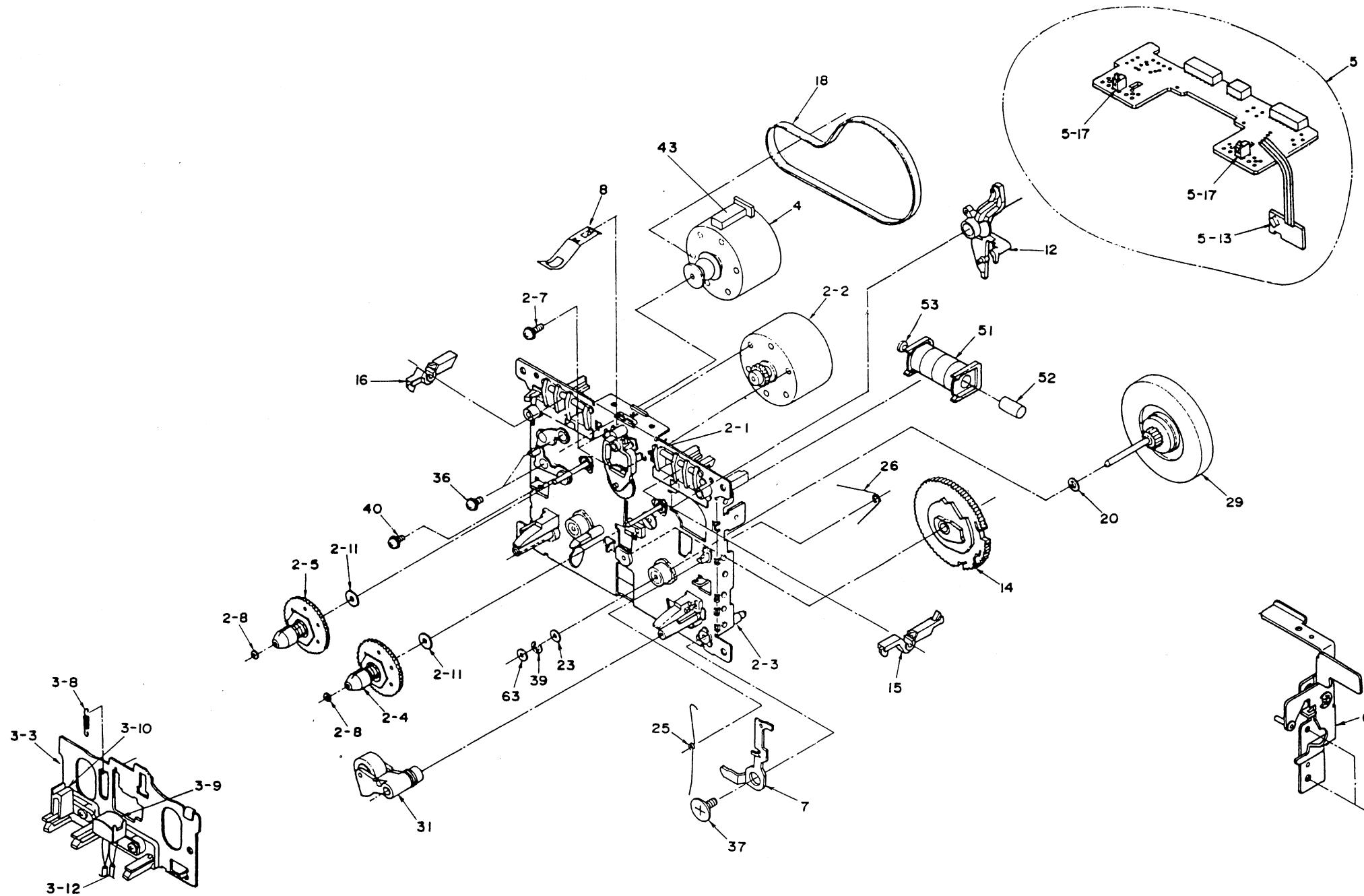
| REF.NO. | PART NO. | DESCRIPTION |
|---------|-----------|---------------------------|
| 2-1 | 24602482 | IDLER AS |
| 2-2 | 24601245 | REEL MOTOR |
| 2-3 | 24611382B | BASE AS (CHASSIS) |
| 2-4 | 24602483 | BASE AS (REEL) |
| 2-5 | 24602484 | BASE AS (REEL) |
| 2-7 | 24609032 | PAN HEAD SCREW 2.6×6.4ZN |
| 2-8 | 24611177 | PLASTIC WASHER 1.7×0.25t |
| 2-11 | 24611175 | PLASTIC WASHER 2.1×0.25t |
| 3-3 | 24611501 | HEAD BASE |
| 3-8 | 24605711 | SPRING |
| 3-9 | 24600067 | R/P HEAD |
| 3-10 | 24600032 | E HEAD |
| 3-11 | 24606472 | LEAD WIRE (R/P) |
| 3-12 | 24606473 | LEAD WIRE (E) |
| 4 | 24601252 | MAIN MOTOR AS |
| 5 | 24606428 | P.C.B. AS (CONTROL.) |
| 5-13 | 24606463 | PHOTO REFLECTOR |
| 5-17 | 24606271 | PUSH SWITCH |
| 7 | 24607102 | ARM (EJECT) L |
| 8 | 24605739 | SPRING |
| 12 | 24607116 | ARM (PLAY) |
| 14 | 24602485A | CAM GEAR (3R) |
| 15 | 24603365A | LEVER (REC) |
| 16 | 24603366 | LEVER (PACK) (L) |
| 17 | 24603367 | LEVER (METAL) (L) |
| 18 | 24602539 | MAIN BELT |
| 20 | 24611041 | PLASTIC WASHER 2.6×0.25t |
| 23 | 24610841 | PLASTIC WASHER 2.6×0.55t |
| 25 | 24605741 | SPRING |
| 26 | 24605716 | SPRING |
| 29 | 24602487 | FLYWHEEL AS |
| 31 | 24602541 | PINCH ROLLER AS (R) |
| 36 | 24609001 | PAN HEAD SCREW SW2.6×5ZN |
| 37 | 24609006A | SCREW |
| 39 | 8930151 | E WASHER 1.5S |
| 40 | 838130080 | WAVE SCREW 3×8ZN |
| 43 | 24611488 | CUSHION (HOLDER) |
| 51 | 24606333 | SOLENOID COIL AS |
| 52 | 24606332A | CORE |
| 53 | 24606331 | PLANGER |
| 61 | 24611449 | PLATE HOLDER AS |
| 62 | 833126049 | TAP-TIGHT SCREW 2.6TTP+4C |
| 63 | 24611188A | WASHER (OIL SEAL) |
| 68 | 24602404 | COUNTER BELTE |

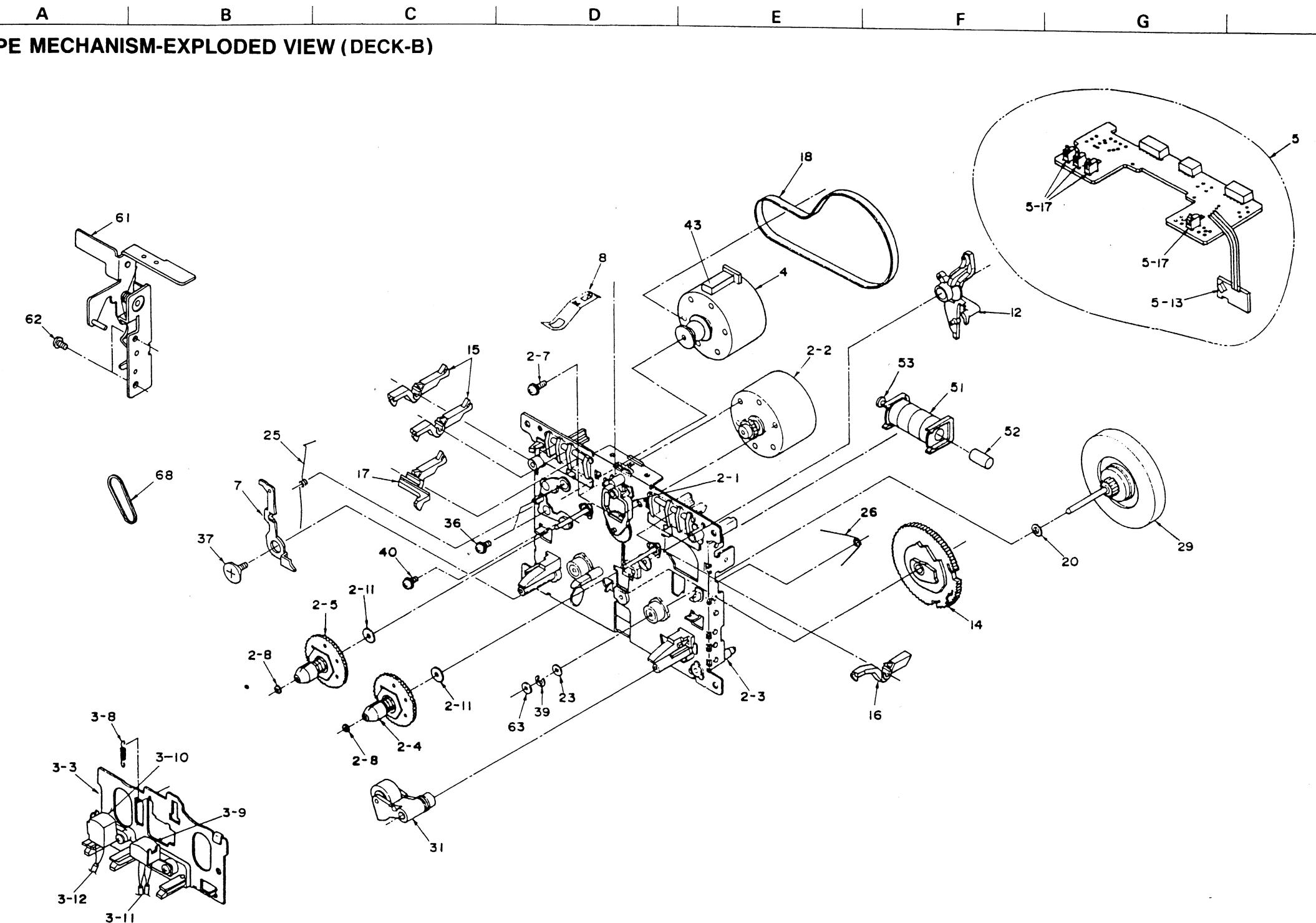
TAPE MECHANISM PARTS LIST (DECK-A)

| REF.NO. | PART NO. | DESCRIPTION |
|---------|-----------|---------------------------|
| 2-1 | 24602482 | IDLER AS |
| 2-2 | 24601245 | REEL MOTOR |
| 2-3 | 24611382B | BASE AS (CHASSIS) |
| 2-4 | 24602483 | BASE AS (REEL) |
| 2-5 | 24602484 | BASE AS (REEL) |
| 2-7 | 24609032 | PAN HEAD SCREW 2.6×6.4ZN |
| 2-8 | 24611177 | PLASTIC WASHER 1.7×0.25t |
| 2-11 | 24611175 | PLASTIC WASHER 2.1×0.25t |
| 3-3 | 24611501 | HEAD BASE |
| 3-8 | 24605711 | SPRING |
| 3-9 | 24600066 | P HEAD |
| 3-10 | 24600048 | E HEAD (DUMMY) |
| 3-12 | 24606474 | LEAD WIRE (R/P) |
| 4 | 24601252 | MAIN MOTOR AS |
| 5 | 24606430 | P.C.B. AS (CONTROL) |
| 5-13 | 24606463 | PHOTO REFLECTOR |
| 5-17 | 24606271 | PUSH SWITCH |
| 7 | 24607065B | ARM (EJECT) L |
| 8 | 24605739 | SPRING |
| 12 | 24607116 | ARM (PLAY) |
| 14 | 24602485A | CAM GEAR (3R) |
| 15 | 24603365A | LEVER (REC) |
| 16 | 24603369 | LEVER (PACK) |
| 18 | 24602539 | MAIN BELT |
| 20 | 24611041 | PLASTIC WASHER 2.6×0.25t |
| 23 | 24610841 | PLASTIC WASHER 2.6×0.55t |
| 25 | 24605762 | SPRING |
| 26 | 24605716 | SPRING |
| 29 | 24602487 | FLYWHEEL AS |
| 31 | 24602541 | PINCH ROLLER AS (R) |
| 36 | 24609001 | PAN HEAD SCREW SW2.6×5ZN |
| 37 | 24609006A | SCREW |
| 39 | 8930151 | E WASHER 1.5S |
| 40 | 838130080 | WAVE SCREW 3×8ZN |
| 43 | 24611488 | CUSHION (HOLDER) |
| 51 | 24606333 | SOLENOID COIL AS |
| 52 | 24606332A | CORE |
| 53 | 24606331 | PLANGER |
| 61 | 24611447 | PLATE HOLDER AS |
| 62 | 833126049 | TAP-TIGHT SCREW 2.6TTP+4C |
| 63 | 24611188A | WASHER (OIL SEAL) |

A | B | C | D | E | F | G |

APE MECHANISM-EXPLODED VIEW (DECK-A)





A

B

C

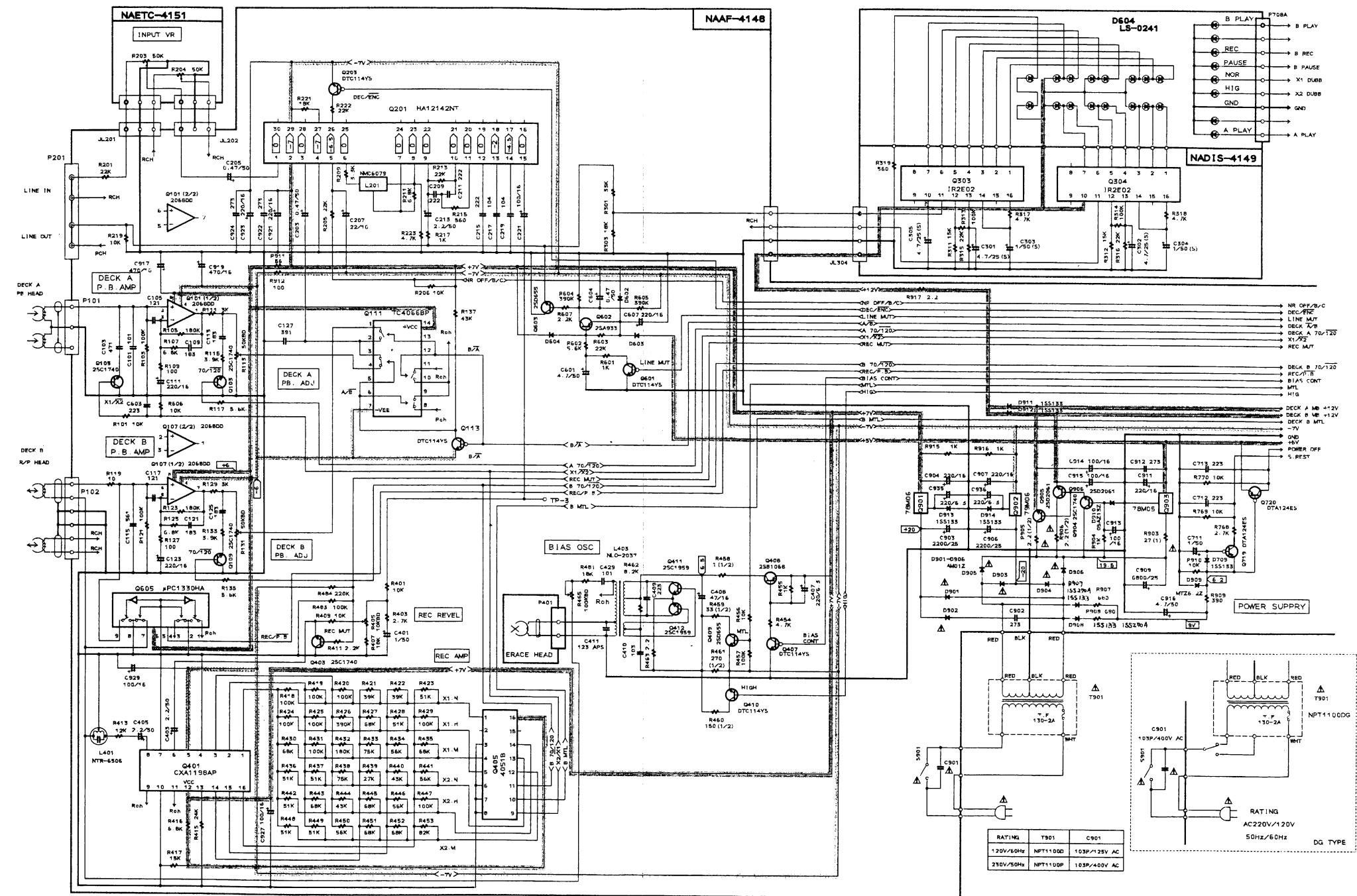
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SCHEMATIC DIAGRAM (AUDIO SECTION) 1/2



ONKYO CORPORATION

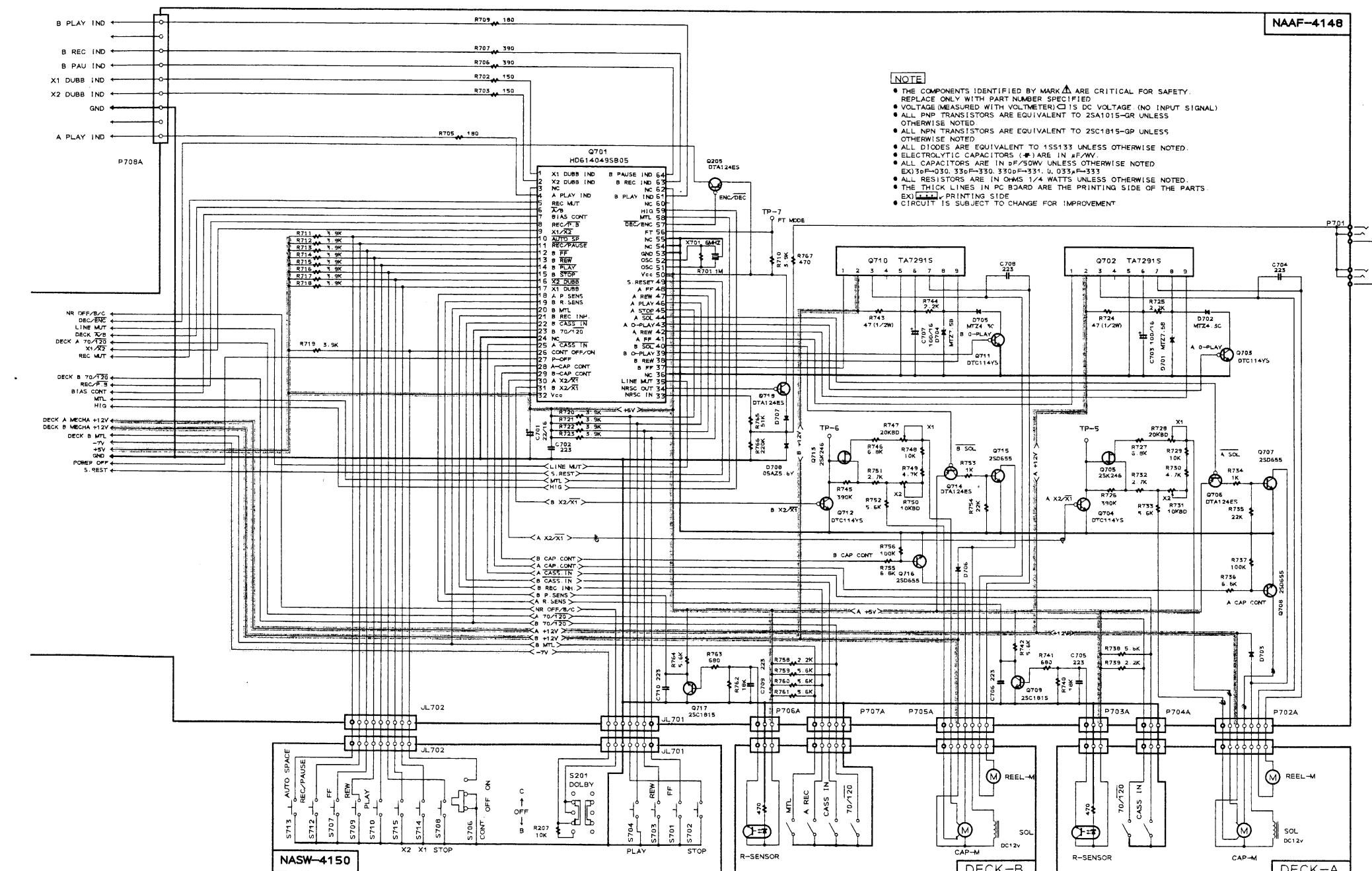
A

B

6

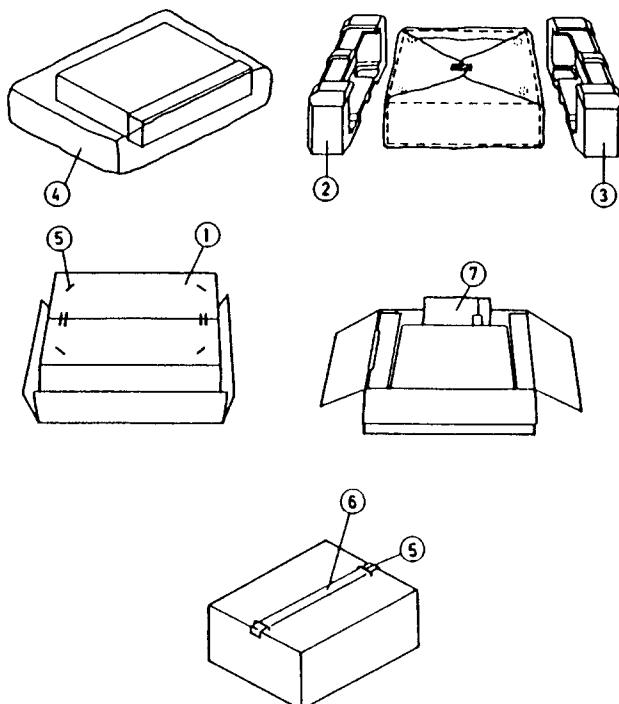
1

SCHEMATIC DIAGRAM (CONTROL SECTION) 2/2



ONKYO CORPORATION

PACKING VIEW



PACKING PART LIST

| REF.NO. | PART NO. | DESCRIPTION |
|---------|----------------------------|----------------------------|
| 1 | 29052344AY | Master carton box |
| 2 | 29091452B | Pad (L) |
| 3 | 29091453B | Pad (R) |
| 4 | 29100105 | 620x550 Poly bag |
| 5 | 282301 | Sealing hook |
| 6 | 29110071 | Dampion tape |
| 7 | | |
| | Accessory bag ass'y | |
| | 29341690 | Instruction manual (D) |
| | 29341717Y | Instruction manual (G/W/C) |
| | 2010098A | Connection cable |
| | 29100006A | 350x250 Poly bag |
| | 29365019A | Warranty card (N) |
| | 25055040 | CV plug CV-K-2 (W) |
| | 29358002J | Service station list (N) |

NOTE (D): Only 120V model

(N): Only U.S.A. model

(W): Only worldwide model

(C): Only Canadian model

ONKYO CORPORATION

International Division: Onarimon Yusen Bldg., 23-5, Nishi-Shimbashi 3-chome, Minato-ku,
TOKYO 105, JAPAN Tel: 03-3432-6987 Fax: 03-3436-6979

ONKYO U.S.A. CORPORATION

200 Williams Drive, Ramsey, N.J. 07446, U.S.A.
Tel: 201-825-7950 Fax: 201-825-8150

ONKYO Europe GmbH

Hellersbergstrasse 4, W-4040 Neuss GERMANY
Tel: 02101 12 00 75 Fax: 02101 10 33 06 TLX: 85 17 916 ONDU D

ONKYO FRANCE S.A.R.L.

Immeuble Le DIAMANT, Domaine Technologique De Saclay, 4 rue Rene Razet,
91892 SACLAY, FRANCE Tel: (1)69 41 35 10 Fax: (1)69 41 35 84